* The speed of a runner who sprints 500 meters in 96 seconds is \_\_\_\_\_\_\_\_\_\_.
* When objects are moved further apart, the force of gravity between them \_\_\_\_\_\_\_\_\_\_\_.
* If the net force acting on a stationary object is 0 N, the object will \_\_\_\_\_\_\_\_\_\_\_\_\_.
* Which object has the greatest inertia?
* A force of 2000 N is applied to cart A, which has a mass of 50 kg. The same force (2000 N) is applied to cart B, which has a mass of 100 kg. Cart C is pushed with the same amount of force, but has a mass of 25 kg. Which statement is true?

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| Which of the following is true? | |
|  | Friction is greatest when two touching objects have rough surfaces. |
|  | Friction can exist between two objects, even if they don't touch. |
|  | When a truck is parked on a hill, friction pulls the truck down the hill. |
|  | Air resistance always opposes friction. |

* What effort force must be provided to lift a crate that has a weight of 650 N if you use a lever with a mechanical advantage of 13?
* What happens when a skydiver opens her parachute?
* How much work is done if you use a 40 N force to carry an object 3 meters forward?
* A tug-of-war that results in one team pulling the other across the line is an example of \_\_\_\_\_\_\_\_\_\_.
* What is the ideal mechanical advantage of a ramp that is 40 meters long and 6 meters high?
* What is the mechanical advantage of a system of pulleys that has 10 supporting strands and begins with a fixed pulley?
* Which of Newton's Laws states that for every action there is an equal, opposite reaction?
* \_\_\_\_\_\_\_\_\_\_ describes both speed and direction.
* The combination of all forces acting on an object is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Which acceleration tells you that there was an INCREASE in speed?
* Which of the following is NOT a simple machine?
* In which class of lever will the effort force be found somewhere in the middle of the lever?
* Which of the following indicates the greatest net force?
* What happens when a car slows down and velocity changes?
* Why is a bookshelf NOT a simple machine?
* A force is continually applied to an object, causing it to accelerate. After a period of time, however, the object stops accelerating. What conclusion can be drawn?
* Neglecting air resistance, how would the acceleration of a 1.5 kg block differ from the acceleration of a 15 kg rock if the objects were dropped from the same height?
* Which of the following does not belong in the lever family?
* Speeding up, slowing down, and changing direction are the three ways to describe \_\_\_\_\_\_\_\_\_\_.